

Message

From: Partridge, Charles [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=27DA56DA9A12472787EF56077099CF36-PARTRIDGE, CHARLES]
Sent: 12/11/2019 1:28:51 PM
To: Wall, Dan [wall.dan@epa.gov]
CC: OBrien, Wendy [OBrien.Wendy@epa.gov]
Subject: Fwd: URGENT FOR OSRTI: Significant News Article - "Authors of Butte pilot study on metals push back against questions on statistics" - MT Standard

Dan,

I will talk to burgess. Please let me know the follow -up. I'll let you send this up the chain, as needed.

Cp

Sent from my iPhone

Begin forwarded message:

From: "Burgess, Michele" <Burgess.Michele@epa.gov>
Date: December 11, 2019 at 5:02:38 AM MST
To: "Partridge, Charles" <Partridge.Charles@epa.gov>
Subject: FW: URGENT FOR OSRTI: Significant News Article - "Authors of Butte pilot study on metals push back against questions on statistics" - MT Standard

Michele Burgess, PhD
Office of Land and Emergency Management
Office of Superfund Remediation & Technology Innovation
Science Policy Branch
Ph:703-603-9003
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1200 Pennsylvania Ave., NW
MC 5204P
Washington, DC 20460

From: Gartner, Lois <Gartner.Lois@epa.gov>
Sent: Tuesday, December 10, 2019 6:16 PM
To: Libelo, Laurence <Libelo.Laurence@epa.gov>; Fitz-James, Schatzi <Fitz-James.Schatzi@epa.gov>
Cc: Gaines, Linda <Gaines.Linda@epa.gov>; Burgess, Michele <Burgess.Michele@epa.gov>; Lowery, Brigid <Lowery.Brigid@epa.gov>; Kirk, Andrea <Kirk.Andrea@epa.gov>
Subject: RE: URGENT FOR OSRTI: Significant News Article - "Authors of Butte pilot study on metals push back against questions on statistics" - MT Standard

I emailed Jackie about 25 min ago to see if she had an ETA for the statement but haven't heard back from her. I'm about to head for home and won't be able to check email during my commute.

From: Libelo, Laurence <Libelo.Laurence@epa.gov>
Sent: Tuesday, December 10, 2019 6:10 PM
To: Fitz-James, Schatzi <Fitz-James.Schatzi@epa.gov>
Cc: Gaines, Linda <Gaines.Linda@epa.gov>; Burgess, Michele <Burgess.Michele@epa.gov>; Lowery, Brigid <Lowery.Brigid@epa.gov>; Gartner, Lois <Gartner.Lois@epa.gov>; Kirk, Andrea

<Kirk.Andrea@epa.gov>

Subject: Re: URGENT FOR OSRTI: Significant News Article - "Authors of Butte pilot study on metals push back against questions on statistics" - MT Standard

Adding Andrea to the thread-

interesting study.

I haven't seen much about metal levels in meconium. There are some pubs in using maternal blood metal conc as a predictor of meconium stained amniotic fluid.

It is difficult to say much about the data until we got it. We can comment on the study assuming the data are ok but I would suggest at this point we don't.

We can look at it quickly once we get it.

Sent from my iPhone

On Dec 10, 2019, at 5:09 PM, Fitz-James, Schatzi <Fitz-James.Schatzi@epa.gov> wrote:

You have as much information as we do. Also Wonder if they talked to Charlie Partridge for any input

Sent from my iPhone

On Dec 10, 2019, at 5:03 PM, Gaines, Linda <Gaines.Linda@epa.gov> wrote:

Did R8 get the raw data? This is either a poorly reported story, or a poorly reported study. I have never heard of anyone reporting a biomarker with units of ppm or ppb. You can't tell what you are looking at without proper units like mg [contaminant]/ g or l media. You also can't tell if they standardized. It also doesn't say how many subjects.

Linda G.T. Gaines, Ph.D., P.E., BCEE
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Phone: (703) 603-7189

From: Fitz-James, Schatzi <Fitz-James.Schatzi@epa.gov>

Sent: Tuesday, December 10, 2019 4:47 PM

To: Libelo, Laurence <Libelo.Laurence@epa.gov>; Gaines, Linda <Gaines.Linda@epa.gov>; Burgess, Michele <Burgess.Michele@epa.gov>

Cc: Lowery, Brigid <Lowery.Brigid@epa.gov>; Gartner, Lois <Gartner.Lois@epa.gov>

Subject: FW: URGENT FOR OSRTI: Significant News Article - "Authors of Butte pilot study on metals push back against questions on statistics" -

MT Standard
Importance: High

Hope one of you are available to quickly review and work with Helen's group and Lois. Thanks.

From: Harwood, Jackie <Harwood.Jackie@epa.gov>
Sent: Tuesday, December 10, 2019 4:32 PM
To: OLEM OSRTI Press <OLEM-OSRTI-Press@epa.gov>
Cc: Lowery, Brigid <Lowery.Brigid@epa.gov>; Fitz-James, Schatzi <Fitz-James.Schatzi@epa.gov>; Ammon, Doug <Ammon.Doug@epa.gov>; Woolford, James <Woolford.James@epa.gov>; Stalcup, Dana <Stalcup.Dana@epa.gov>
Subject: URGENT FOR OSRTI: Significant News Article - "Authors of Butte pilot study on metals push back against questions on statistics" - MT Standard
Importance: High

Hi All,

OPA just let me know that R8 is developing a statement on the article below. As soon as they get it, we'll have to do an immediate review of the statement. Wanted to let you know so you can be ready.

Thanks.

*Jackie Harwood
Communications Director
Office of Land and Emergency Management (OLEM/OCPA)
U.S. Environmental Protection Agency
(202) 564-7578
Follow OLEM on Twitter: @EPALand*

From: Mutter, Andrew
Sent: Tuesday, December 10, 2019 10:54 AM
To: Sopkin, Gregory <sopkin.gregory@epa.gov>; Deb Thomas (thomas.debrah@epa.gov) <thomas.debrah@epa.gov>
Cc: Jag Sethuraman (Sethuraman.Jag@epa.gov) <Sethuraman.Jag@epa.gov>; Patrick Davis (davis.patrick@epa.gov) <davis.patrick@epa.gov>; Mylott, Richard <Mylott.Richard@epa.gov>; Betsy Smidinger (Smidinger.Betsy@epa.gov) <Smidinger.Betsy@epa.gov>; Aaron Urdiales (Urdiales.Aaron@epa.gov) <Urdiales.Aaron@epa.gov>; Vranka, Joe <vranka.joe@epa.gov>
Subject: Significant News Article - "Authors of Butte pilot study on metals push back against questions on statistics" - MT Standard

Greg and Deb,

For your awareness. The team is working a statement now to get out ASAP. Will ensure you all get to review prior to launch.

https://mtstandard.com/news/local/authors-of-butte-pilot-study-on-metals-push-back-against/article_e083b529-e8a5-577e-a3d2-d3e2dafa8cb2.html#tracking-source=home-top-story-2

The scientists who produced a recently published pilot study of Butte infants' meconium pushed back hard Monday against intimations by some stakeholders that there must be an error of scale in the the reporting of the study's results.

The study showed levels of zinc, manganese and copper in Butte infants' meconium to be 1,883 times higher for zinc, 1,650 times higher for manganese and 1,792 times higher for copper than the samples taken from a control group in Columbia, South Carolina.

"I understand that the EPA doesn't like our findings," said Dr. Katie Hailer of Montana Technological University, "But the numbers are expressed correctly."

That was echoed by Dr. Jamie Lead, the lead chemist on the project, and Dr. Suzanne McDermott, both of the University of South Carolina.

While no one has gone on the record to say the study is inaccurate, there has been discussion within the local scientific community and among stakeholders that metals levels in meconium, reported in other published studies of non-polluted sites, would be close to the same as those in Butte if expressed in the same ratio (parts per billion) as opposed to parts per million, leading them to question whether an error of scale had been made in the Butte study.

But Read said Monday that the "Butte meconium levels are similar to a single study from a highly polluted site. The Columbia data are similar to data ... from less polluted sites in Europe and Canada. This conclusion is quite clear from a correct reading of the peer-reviewed literature data. There is really no room for ambiguity."

Hailer said that the most important comparison — the one upon which the study was based — is between the Butte samples and those from South Carolina. While the two data sets were analyzed by different labs, she said, the methodology was identical. "The samples were collected, digested, diluted, and analyzed in exactly the same manner," she said. "This is a non-issue and some people seem intent on making it an issue."

She added, "You can't equate or compare two completely different studies just by doing the math and converting parts per million into parts per billion."

"There is no error," said McDermott.

The study by McDermott, Hailer and Lead was not originally intended to be published. It was a pilot study with a very small sample size, intended to potentially demonstrate both the feasibility and the need for a much larger, more comprehensive study. But McDermott said that when the team saw the results, which she termed "shocking," it was decided that they needed to be published.

"Our work was published in a peer-reviewed journal," Hailer said. "Do others have information that authoritative?"

A spokesperson for the Environmental Protection Agency said the agency had asked the researchers for their raw data last week, and the agency would have no further comment until that data was received and analyzed.

"The EPA has asked for our data, apparently to check our math," Hailer confirmed Monday. "That's a little insulting, but that's okay." She said the scientists would provide their data to the agency.

"Apparently they think our data was represented in two different scales," she said. "That is not true."

The scientists again emphasized the need for a larger, more comprehensive study. An initial application to the National Institute for Environmental Health for a grant to cover a \$1.1 million study was turned down, but the scientists say they will reapply.

Best regards,

Andrew

Andrew Mutter

Director, Public Affairs
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Facebook: [U.S. EPA Region 8](https://www.facebook.com/USEPARegion8)
Webpage: EPA Region 8 (Mountains and Plains)